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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,870	09/29/2003	Thomas Bretschneider	Mo6592D/LeA 33/498D	1359

34469 7590 05/26/2004

BAYER CROPSCIENCE LP  
Patent Department  
100 BAYER ROAD  
PITTSBURGH, PA 15205-9741

EXAMINER
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PAK, JOHN D

ART UNIT	PAPER NUMBER
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1616

DATE MAILED: 05/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/673,870	<b>Applicant(s)</b> BRETSCHNEIDER ET AL.	
	<b>Examiner</b> JOHN D PAK	<b>Art Unit</b> 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 6-12 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 09/937,239.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
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| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/18/03</u> . | 6) <input type="checkbox"/> Other: ____  |

Claims 6-12 are pending in this application.

Applicant is requested to clarify claim 6, in the subparagraph that begins, "A' and B' together ..." At lines 5-6 of said subparagraph, the phrase "or is optionally benzo-fused" is confusing. It is not clear what portion of the claim the phrase modifies. It is also not clear what "benzo-fused" means. What is the benzene ring fused to or with?

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Fischer et al. and CABA abstract 1999:29730.

Fischer et al. (US 5,262,383) disclose the cyclic ketoenols of applicant's formula (I). See in Fischer et al. columns 1-16. See columns 29-30, the eleventh compound, which is the same as applicant's specific compound of applicant's claim 7. A broad spectrum insecticidal and acaricidal activity is disclosed (column 127, line 30 to column 130, line 21, see column 128, lines 52-58 in particular). Formulation with excipients is disclosed (column 130, line 27 to column 131, line 24). Formulation with other active compounds such as insecticides is disclosed (column 131, lines 28-32). Active ingredient amount of 0.1 to 95 wt% is disclosed (column 131, lines 24-26).

CABA abstract 1999:29730 discloses MTI-446, which is the same compound as applicant's formula (II I) compound, as having good insecticidal activity via contact and systemic modes, and favorable toxicological and environmental profile.

The difference between the claimed invention and the cited references is that the references do not expressly disclose the combination of cyclic ketoenols with the compound of formula (II I). However, Fischer et al. suggests combining cyclic ketoenols with additional insecticides. One having ordinary skill in the art would have been motivated to utilize the compound of formula (II I) as a co-insecticide with Fischer's cyclic ketoenol insecticides due to the disclosed benefits of formula (II I) such as good contact and systemic activity and favorable toxicological and environmental profile. Use of such combined insecticides would have been expected to deliver a combined level of activity that would be expected to provide improved control of target insects.

Although the specific ratio of 1:100 to 100:1 is not disclosed, such a broad range would have been suggested from the disclosed 100-200 g/ha rate of application in crops for formula (II I) compound (CABA abstract), in view of the 0.1 to 95 wt% disclosed for formula (I) compounds (Fischer et al.). The ordinary skilled artisan in this field is an experienced chemist with agrochemical and entomological expertise, who is capable of determining target insect species toxicity-delivering application amounts upon routine experimentation. Given the broad disclosures of the prior art, the ordinary skilled

artisan would have been motivated to arrive at a mixture ratio that would have been within that of the claimed ratio range (applicant's claim 9).

As for the process of preparing the pesticides, the steps recited in claim 12 is no more than a nominal mixing of the two pesticides with extenders or surfactants. Such steps would necessarily have to be practiced in order for the two pesticides to be used together in pest control application utilities. Addition of extenders or surfactants is suggested by Fischer et al.

Lastly, it is recognized that applicant's claims are directed to a synergistically effective mixture of two compounds. It is the Examiner's position that this feature is a patentable distinction that must be established through objective evidence, not through mere assertion in claim language. The test of whether a novel combination of two known compounds is patentable is obviousness or nonobviousness. As such, applicant must provide a showing of nonobvious or unexpected results that is commensurate in scope with that of the claimed subject matter. Keeping in mind that the claims are extremely broad with respect to formula (I) and that there is currently no objective data at all with respect to the claimed subject matter, it must be determined that the evidence of obviousness as shown by the Examiner herein outweighs applicant's evidence of nonobviousness, if any. An insecticidal mixture of formula (I) compound + formula (II I) is fairly suggested, and it is applicant's burden to establish through objective evidence that such a mixture provides unexpectedly synergistic or nonobvious results.

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Therefore, the claimed invention, as a whole, would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, because every element of the invention and claimed invention as a whole have been fairly suggested by the combined teachings of the cited references.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to JOHN PAK whose telephone number is **(571)272-0620**, **effective February 3, 2004**. The Examiner can normally be reached on Monday to Friday from 8 AM to 4:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's SPE, Thurman Page, can be reached on (571)272-0602, effective February 3, 2004.

The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-1600.



JOHN PAK  
PRIMARY EXAMINER  
GROUP 1000